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(54) Title: USE OF TAUROLIDINE OR TAURULTAM FOR THE MANUFACTURE OF A MEDICAMENT FOR THE TREATMENT OF TUMORS OF THE CENTRAL NERVOUS SYSTEM

(57) Abstract: The invention provides a method of inhibiting tumor growth in a mammal, by administering to the mammal composition containing taurolidine, taurultam, or a biologically active derivative thereof. The composition is administered to directly contact a tumor cell at a dose sufficient to induce cell death by apoptosis.

INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K31/541

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, CHEM ABS Data, MEDLINE, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94 03174 A (ED GEISTLICH SÖHNE AG. FÜR CHEMISCHE INDUSTRIE) 17 February 1994 (1994-02-17) claims 1,3,4	32,33
X	WO 92 00743 A (ED GEISTLICH SÖHNE AG FÜR CHEMISCHE INDUSTRIE) 23 January 1992 (1992-01-23) the whole document	1-36
X	WO 90 06138 A (ED GEISTLICH SÖHNE A.G. FÜR CHEMISCHE INDUSTRIE) 14 June 1990 (1990-06-14) claims 1-5	32,33
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Z document member of the same patent family

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	EP 1 066 830 A (ED. GEISTLICH SÖHNE AG. FÜR CHEMISCHE INDUSTRIE) 10 January 2001 (2001-01-10) the whole document ----	1-36
X	WO 98 52572 A (OKLAHOMA MEDICAL RESEARCH FOUNDATION) 26 November 1998 (1998-11-26) claims 1-16 -----	1-36

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/33103

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9403174	A	17-02-1994	CA 2141056 A1	17-02-1994
			EP 0652753 A1	17-05-1995
			WO 9403174 A1	17-02-1994
			JP 7509483 T	19-10-1995
WO 9200743	A	23-01-1992	WO 9200743 A1	23-01-1992
			EP 0491018 A1	24-06-1992
			JP 5500973 T	25-02-1993
WO 9006138	A	14-06-1990	CA 2004166 A1	31-05-1990
			DE 68913991 D1	21-04-1994
			DE 68913991 T2	14-07-1994
			EP 0446262 A1	18-09-1991
			ES 2063333 T3	01-01-1995
			WO 9006138 A1	14-06-1990
			JP 2873082 B2	24-03-1999
			JP 4502414 T	07-05-1992
			US 5819748 A	13-10-1998
EP 1066830	A	10-01-2001	EP 1066830 A2	10-01-2001
			JP 2001010976 A	16-01-2001
WO 9852572	A	26-11-1998	AU 734460 B2	14-06-2001
			AU 7590698 A	11-12-1998
			EP 0983069 A1	08-03-2000
			WO 9852572 A1	26-11-1998
			US 6303596 B1	16-10-2001